

Patent
10/815,499

CLAIMS

Please cancel Claims 1 and 10-18.

Please amend Claims 2, 4-7 as shown.

1. (Canceled)

2. (Currently Amended) ~~The semiconductor device of Claim 1~~ A semiconductor device, comprising

a bottom lead frame having at least one tilt flap;

a die attached on the bottom lead frame;

a top conductive element attached on the die; and

a molding compound for molding the semiconductor device, wherein the molding compound surrounds the at least one tilt flap to lock the molding compound onto said bottom lead frame,

wherein the bottom lead frame has a first edge and a second edge, the first edge opposite the second edge, and the second edge of the bottom lead frame having a reduced portion extending outward from the die-attached portion of the bottom lead frame, wherein the reduced portion has a portion of the bottom lead frame removed from each of opposite sides thereof.

Patent
10/815,499

3. (Original) The semiconductor device of Claim 2, wherein the at least one tilt flap is provided at the first edge and extends outward from the bottom lead frame.

4. (Currently Amended) ~~The semiconductor device of Claim 2,~~ A semiconductor device, comprising

a bottom lead frame having at least one tilt flap;

a die attached on the bottom lead frame;

a top conductive element attached on the die; and

a molding compound for molding the semiconductor device, wherein the molding compound surrounds the at least one tilt flap to lock the molding compound onto said bottom lead frame,

wherein the bottom lead frame has a first edge and a second edge, the first edge opposite the second edge, and the second edge of the bottom lead frame having a reduced portion extending outward from the die-attached portion of the bottom lead frame,

wherein the reduced portion has a portion of the bottom lead frame removed from each of opposite sides thereof, and

wherein the second edge of the bottom lead frame further comprises at least one tilt flap extending inward towards the bottom lead frame.

Patent
10/815,499

5. (Currently Amended) ~~The semiconductor device of Claim 3,~~ A semiconductor device, comprising

a bottom lead frame having at least one tilt flap;

a die attached on the bottom lead frame;

a top conductive element attached on the die; and

a molding compound for molding the semiconductor device, wherein the molding compound surrounds the at least one tilt flap to lock the molding compound onto said bottom lead frame, wherein the bottom lead frame has a first edge and a second edge, the first edge opposite the second edge, and the second edge of the bottom lead frame having a reduced portion extending outward from the die-attached portion of the bottom lead frame,

wherein the reduced portion has a portion of the bottom lead frame removed from each of opposite sides thereof,

wherein the at least one tilt flap is provided at the first edge and extends outward from the bottom lead frame, and

wherein the second edge of the bottom lead frame further comprises at least one tilt flap extending inward towards the bottom lead frame.

6. (Currently Amended) The semiconductor device of Claim 4, wherein the semiconductor device is a rectifier of surface mount package.

7. (Currently Amended) The semiconductor device of Claim 4, wherein the thickness of the bottom lead frame is less than 10 mils.

8. (Original) The semiconductor device of Claim 4, wherein the second edge includes two tilt flaps extending inwards towards the bottom lead frame.

9. (Original) The semiconductor device of Claim 5, wherein the second edge includes two tilt flaps extending inwards towards the bottom lead frame.

10-18. (Canceled)